



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
|-----------------|-------------|----------------------|---------------------|------------------|

10/731,483

12/10/2003

Hon-Rok Woo

45912

5404

1609

7590

01/24/2008

ROYLANCE, ABRAMS, BERDO & GOODMAN, L.L.P.

1300 19TH STREET, N.W.

SUITE 600

WASHINGTON,, DC 20036

EXAMINER

MCLEAN, NEIL R

ART UNIT

PAPER NUMBER

2625

MAIL DATE

DELIVERY MODE

01/24/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|-------------------------------|------------------------------|--|
| Office Action Summary | Application No. 10/731,483 | Applicant(s) WOO, HON-ROK | |
| | Examiner Neil R. McLean | Art Unit 2625 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 November 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 11/01/2007 have been fully considered but they are not persuasive.

Regarding Applicant's Argument:

"Christiansen's method and system of customizing an image device does not teach or suggest pre-storing at least one fixed emulation and a received customer emulation so that an image may be generated based on the customer emulation stored in a printer memory if a customer emulation mode is determined".

Examiner's Response:

Referring to Figure 1:

Christiansen discloses a method of loading a parser. The parser is installable, removable and modifiable, as stated in Page 2, [0026], lines 2-5.

Referring to Figure 2:

Christiansen discloses wherein the parser 250 and the server 220 reside within the printer, and as a result is inherently 'stored'. The Examiner perceives the parser 250 to be a fixed emulation, and the loadable parser 240 to be equivalent to applicants customer emulation which also is loaded and stored in the printer as described on Page 3, Column 2, lines 3-7.

Referring to Figure 14:

Christiansen discloses a printer with a parser included within the printer and shows how a customer can modify the existing parser to achieve a desired format and that more than one parser may operate on the computer file 1460 to produce print data as described on Page 9, [0085].

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. Claims 1-12 are rejected under 35 U.S.C. 102(e) as being anticipated by Christiansen (US 2004/0001218).

Regarding Claim 1:

A printing system ([0036], lines 1-2; 'imaging system'; 200 in Figure 2) to support a customer emulation, comprising:

a computer interface (See I/O Port 1010 and Network interface 1012 in Figure 10) to receive the customer emulation (See Loadable Parser 240 in Figure 2) which is defined by a customer ([0032] 'a parser programmer can focus on the language to parse and the actions to perform in response to parsing events') and a predetermined printing command signal from an external computer (See Remote Computer 1022 in Figure 10).

a printer memory (See Memory 1004 in Figure 10) to store at least one pre-stored (Page 3, Column 2, lines 3-7) fixed emulation ([0033], lines 10-12) and the received customer emulation (See Loadable Parser 240 in Figure 2); and

a printer control unit (See Processor 1002 in Figure 10) to determine an emulation mode of the printing command signal, and if it is determined to be a customer emulation mode (See Loadable Parser 240 in Figure 2), to generate an image based on the customer emulation ([0080], 'By loading one or more parsers, callbacks, and/or parse trees into a printer by computer communications, the systems, methods, and computer readable media described herein facilitate **updating and/or customizing** a printer') stored in the printer memory (See Memory 1004 in Figure 10).

wherein the customer emulation mode executes a function command based on the fixed emulation (e.g., the parser described in [0050]).

Regarding Claim 2:

The printing system of claim 1, wherein, if the printer control unit (See Processor 1002 in Figure 10) determines the emulation mode of the received printing command signal to be a fixed emulation mode ([0033], lines 10-12), the printer control unit

generates an image ([0085], 'printer 1400 also includes a parser 1470 that accepts a computer file 1460, parses it, and produces the print data 1480') based on the fixed emulation stored in the computer memory (See Memory 1004 in Figure 10).

Regarding Claim 3:

The printing system of claim 1, further comprising a print unit (See Printer 1400 in Figure 14) to print the generated image ([0076], lines 3-4; 'making a **printout**') under the control of the printer control unit (See Controller 1450 in Figure 14).

Regarding Claim 4:

The printing system of claim 1, wherein the customer emulation (Parser 1470 in Figure 14) is configured with a newly-defined instruction ([0085], lines 3-5; '**dynamically** customized') which corresponds to an instruction that configures any one ([0085], lines 16-19; 'while a **single** parser...') of the fixed emulations ([0033], lines 10-12).

Regarding Claim 5:

The printing system of claim 1, wherein the external computer (1000 in Figure 10) comprises:

a computer memory (1004 in Figure 10) to store a predetermined customer emulation generating program ([0085], 'the printer 1400 can be dynamically customized by electronically updating the parser 1470') and the generated customer emulation (See Loadable Parser 240 in Figure 2);

an I/O interface (See I/O Ports 1010 in Figure 10) unit to communicate with an external device (See I/O Devices 1018 in Figure 10); and

a computer control unit (See Processor 1002 in Figure 10) to control to generate the customer emulation using the printing command signal and the customer emulation generating program and to transfer the customer emulation to the external device (1018) through the I/O interface unit (1010).

Regarding Claim 6:

The printing system of claim 5, wherein the external computer (1022 in Figure 10) comprises:

a display unit to output the customer emulation generating program ([0075]; 'remote computer 1022, from which a loadable parser may be **received** in a computer communication'); and

an external input unit (See I/O Devices 1018 in Figure 10) to receive a customer input ([0074]; 'Input/output devices 1018 can include, but are not limited to, a keyboard, a microphone, a pointing and selection device, cameras, video cards, displays, and the like. '); corresponding to the customer emulation generating program.

Regarding Claim 7:

A customer emulation supporting method in a printing system which is pre-stored with at least one fixed emulation, comprising the steps of:

receiving a customer emulation (See Loadable Parser 240 in Figure 2) which is defined by a customer (The program code or device which perform the function described in [0032] 'a parser programmer can focus on the language to parse and the actions to perform in response to parsing events');

storing the received customer emulation (The program code or device which enables the storing in Memory 1004 in Figure 10); and

receiving a predetermined printing command signal (The program or device which enables the Remote Computer 1022 in Figure 10 to send command signal). and determining an emulation mode of the printing command signal, and if it is determined to be a customer emulation mode (See Loadable Parser 240 in Figure 2), generating an image based on the stored customer emulation (The program code or device which facilitates updating and/or customizing a printer as described in [0080];

wherein the customer emulation mode facilitates the execution of a function based on a fixed emulation (e.g., the parser described in [0050]).

Regarding Claim 8:

The method of claim 7, further comprising the step of, if the emulation mode of the printing command signal is determined to be a fixed emulation mode (The program code or device which determines that which is described in [0033], lines 10-12), generating an image based on the fixed emulation (The program code or device which performs the function described in ([0085], 'printer 1400 also includes a parser 1470 that accepts a computer file 1460, parses it, and produces the print data 1480').

Regarding Claim 9:

The method of claim 7, further comprising the step of printing the generated image (The program code or device that enables what is described in [0082] and [0083]).

Regarding Claim 10:

The method of claim 7, wherein the customer emulation (Parser 1470 in Figure 14) is configured with a newly-defined instruction ([0085], lines 3-5; 'dynamically customized') corresponding to an instruction configuring any one ([0085], lines 16-19; 'while a **single** parser...') of the fixed emulations ([0033], lines 10-12).

Regarding Claim 11:

The method of claim 7, wherein said receiving step for receiving a customer emulation comprises the step of mapping instructions for executing the customer emulation defined by the customer to at least one fixed emulation function, and said storing step comprises the step of storing at least one fixed emulation function in a template with the mapped instructions ([0038], ('State 390 records the condition of and/or controls the operation of the webserver 320 and/or one or more applets loaded in the webserver 320')).

Regarding Claim 12:

The method of claim 7, wherein said step of receiving a predetermined printing command generating an image based on the stored customer emulation comprises the step of parsing a predetermined command signal in a customer emulation mode to determine which pre-stored fixed emulations correspond thereto ([0039]; 'The parser 350 manipulates the state 390 and/or the state 392 based, at least in part, on control data and/or print data received in the computer file 370').

Conclusion

2. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Schwartz (US 2001/0043358) teaches a method and system which distributes the processing in an optimal way between the host and the printer so as to best achieve the desired result.

3. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Neil R. McLean whose telephone number is 571.270.1679. The examiner can normally be reached on Monday through Friday 7:30AM-5:00PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, King Poon can be reached on 571.272.7440. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Application/Control Number:
10/731,483
Art Unit: 2625

Page 11

N. R. McLean

Neil R. McLean
01/15/2008

K. Y. Poon

KING Y. POON
SUPERVISORY PATENT EXAMINER